

CLAIMS:

Having thus described our invention, what I claim as new, and desire to secure by Letters Patent is:

1. A system for diagnosing and repairing computer systems comprising:
 - a first computing system executing an operating system of a first platform type;
 - an operating system of a second platform type adapted to be executed on said first computing system upon failure of said operating system of said first platform type;
 - an application running under said operating system of said second platform type for obtaining diagnostic information pertaining to said failed operating system;
 - a second computing system executing the same operating system of said first platform type as said failed operating system;
 - a means for communicating said diagnostic information obtained by said application to said second computing system;
 - a means at said second computing system for utilizing said diagnostic information to diagnose the subject failed operating system of said first computing system; and
 - a means executing at said second computing system for generating repair information for communication to the application running on said first computer system to repair the failed operating system.
2. The system as claimed in Claim 1, wherein said generated repair information includes one or more new files necessary to the repair, and, an instruction for copying said new files back to said first computing system.
3. The system as claimed in Claim 1, wherein said generated repair information includes one or more modified files necessary to the repair, and, an instruction for overwriting existing data with modified file data at said first computing system.

4. The system as claimed in Claim 1, wherein said diagnostic information pertaining to said failed operating system comprises relevant file system configuration information including one or more from the group comprising: registry files, system files, system settings, error files, error logs, and other system configuration files of said failed operating system.
5. The system as claimed in Claim 1, wherein said first computing system comprises a partitioned hard disk drive wherein said operating system of said first and second types executes on separate partitions.
6. The system as claimed in Claim 5, wherein said operating system of a first platform type is a Windows-based operating system, and said application executing under said operating system of said second platform type is Linux-based.
7. The system as claimed in Claim 1, wherein said communication means includes a network connection.
8. The system as claimed in Claim 1, wherein said application running under said operating system of said second platform type is enabled to read data from and write data to the files associated with said failed operating system.
9. The system as claimed in Claim 4, wherein said second computing system comprises operating system interface means for enabling the examination of the diagnostic information to determine problem causes and corrections to said failed operating system on said first computing system.
10. A computer system diagnostic and repair service for reviving a failed operating system executing on a remote computing system comprising:
 - one or more proxy computing systems adapted to execute applications under one or more operating systems of varying platform types;
 - a means located at one or more of said proxy computing systems for receiving

diagnostic information obtained from a diagnostic application executing on said remote computing system having a failed operating system to be revived, said diagnostic information relating to said failed operating system being received at a proxy computing device executing the same operating system platform as said failed operating system platform;

a means located at said one or more proxy computing systems for utilizing said received diagnostic information to diagnose the failed operating system to be revived at said remote computing system; and

a means located at said one or more proxy computing systems for generating repair information adapted for communication back to said diagnostic application running on said remote computer system having said failed operating system, wherein said repair information is utilized to enable revival of said failed operating system at said remote computing system.

11. The computer system diagnostic and repair service as claimed in Claim 10, wherein said diagnostic application executes at said remote computing system under a second operating system of a second platform type having been previously booted upon failure of a primary operating system.

12. The computer system diagnostic and repair service as claimed in Claim 10, wherein said diagnostic information pertaining to said failed operating system comprises relevant file system configuration information including one or more from the group comprising: registry files, system files, system settings, error files, error logs, and other system configuration files of said failed operating system.

13. The computer system diagnostic and repair service as claimed in Claim 10, wherein said generated repair information comprises: one or more new files necessary to the repair, and, an instruction for copying said new files back to said remote computing system; or, one or more modified files necessary to the repair, and, an instruction for overwriting existing data with said modified file data at said remote computing system.

14. The computer system diagnostic and repair service as claimed in Claim 10, further

comprising a network communication means for enabling communication of diagnostic information from said remote computing system to said proxy computing system and for enabling communication of repair information from proxy computing system to said remote computing system.

15. A method for diagnosing and repairing a first computing system executing an operating system of a first platform type and subject to a failure diagnosis, said method comprising steps of:

providing an operating system of a second platform type adapted to be executed on said first computing system upon failure of said operating system of said first platform type;

executing an application under said operating system of said second platform type for obtaining diagnostic information pertaining to said failed operating system on said first computing system;

providing a second computing system executing the same operating system of said first platform type as said failed operating system executed on said first computing system;

communicating said diagnostic information obtained by said application to said second computing system;

utilizing said diagnostic information to diagnose the subject failed operating system of said first computing system; and

generating repair information at said second computing system and communicating said repair information to the application running on said first computer system to repair the failed operating system.

16. The method as claimed in Claim 15, wherein said step of generating repair information includes generating one or more new files necessary to the repair, and, an instruction for copying said new files back to said first computing system.

17. The method as claimed in Claim 15, wherein said step of generating repair information includes generating one or more modified files necessary to the repair, and, an instruction for overwriting existing data with modified file data at said first computing system.

18. The method as claimed in Claim 15, wherein said step of obtaining diagnostic information pertaining to said failed operating system includes reading relevant file system configuration information including one or more from the group comprising: registry files, system files, system settings, error files, error logs, and other system configuration files of said failed operating system.
19. The method as claimed in Claim 15, wherein said step of generating repair information includes the step of providing operating system interfaces for enabling the examination of the diagnostic information to determine problem causes and corrections to said failed operating system on said first computing system.
20. A method for reviving a failed operating system executing on a remote computing system, said method comprising the steps of:
 - a) providing a proxy computing system adapted to execute applications under one or more operating systems of varying platform types;
 - b) receiving diagnostic information obtained from a diagnostic application executing on said remote computing system having a failed operating system to be revived, said diagnostic information relating to said failed operating system being received at a proxy computing system executing the same operating system platform as said failed operating system platform;
 - c) utilizing said received diagnostic information at said proxy computing system for diagnosing the failed operating system to be revived at said remote computing system;
 - d) generating repair information at said proxy computing system;
 - e) communicating said generated repair information back to said diagnostic application running on said remote computer system having said failed operating system; and,
 - f) utilizing said repair information to enable revival of said failed operating system at said remote computing system.
21. The method for reviving a failed operating system as claimed in Claim 20, further comprising the steps of: executing a second operating system of a second platform type upon

failure of a primary operating system; and, executing said diagnostic application at said remote computing system under said second operating system

22. The method for reviving a failed operating system as claimed in Claim 20, wherein said diagnostic information pertaining to said failed operating system comprises relevant file system configuration information including one or more from the group comprising: registry files, system files, system settings, error files, error logs, and other system configuration files of said failed operating system.

23. The method for reviving a failed operating system as claimed in Claim 20, further wherein said generated repair information comprises: one or more new files necessary to the repair, and, an instruction for copying said new files back to said remote computing system; or, one or more modified files necessary to the repair, and, an instruction for overwriting existing data with said modified file data at said remote computing system.

24. The method for reviving a failed operating system as claimed in Claim 20, further comprising the step of implementing a network communication means for enabling receipt of said diagnostic information from said remote computing system and, for enabling communication of repair information from said proxy computing system to said remote computing system.

25. A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform method steps for diagnosing and repairing a first computing system executing an operating system of a first platform type and subject to a failure diagnosis, said method steps comprising:

providing an operating system of a second platform type adapted to be executed on said first computing system upon failure of said operating system of said first platform type;

executing an application under said operating system of said second platform type for obtaining diagnostic information pertaining to said failed operating system on said first computing system;

providing a second computing system executing the same operating system of said first platform type as said failed operating system executed on said first computing system;

communicating said diagnostic information obtained by said application to said second computing system;

utilizing said diagnostic information to diagnose the subject failed operating system of said first computing system; and

generating repair information at said second computing system and communicating said repair information to the application running on said first computer system to repair the failed operating system.

26. The program storage device readable by a machine as claimed in Claim 25, wherein said step of generating repair information includes generating one or more new files necessary to the repair, and, an instruction for copying said new files back to said first computing system.

27. The program storage device readable by a machine as claimed in Claim 25, wherein said step of generating repair information includes generating one or more modified files necessary to the repair, and, an instruction for overwriting existing data with modified file data at said first computing system.

28. The program storage device readable by a machine as claimed in Claim 25, wherein said step of obtaining diagnostic information pertaining to said failed operating system includes reading relevant file system configuration information including one or more from the group comprising: registry files, system files, system settings, error files, error logs, and other system configuration files of said failed operating system.

29. The program storage device readable by a machine as claimed in Claim 25, wherein said step of generating repair information includes the step of providing operating system interfaces for enabling the examination of the diagnostic information to determine problem causes and corrections to said failed operating system on said first computing system.

30. A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform method steps for reviving a failed operating system executing on a remote computing system, said method steps comprising:

- a) providing a proxy computing system adapted to execute applications under one or more operating systems of varying platform types;
- b) receiving diagnostic information obtained from a diagnostic application executing on said remote computing system having a failed operating system to be revived, said diagnostic information relating to said failed operating system being received at a proxy computing system executing the same operating system platform as said failed operating system platform;
- c) utilizing said received diagnostic information at said proxy computing system for diagnosing the failed operating system to be revived at said remote computing system;
- d) generating repair information at said proxy computing system;
- e) communicating said generated repair information back to said diagnostic application running on said remote computer system having said failed operating system; and,
- f) utilizing said repair information to enable revival of said failed operating system at said remote computing system.